

# SUPER **LED**F20



DATASHEET

  
DeSisti

# SUPER LED F20

LED Fresnel Spotlight 1.000W - CRI>95

White light, either Tungsten or Daylight balanced CCT

## OVERVIEW

The Super LED F20 is a high efficiency Fresnel lens spotlight using the innovative High Power 1000W internally designed LED Array, in combination with the DE SISTI Internationally Patented optical system for LED FRESNEL and with an enhanced CRI (Color Rendering Index) higher than 95 for appropriate chromacity performances.

The Lighting Fixture is DMX Controlled from 0 to 100% with a super smooth Dimming and a negligible variation of Colour Temperature while controlling the Light intensity.

The F20 is available with either Tungsten (3.200°K) or Daylight (5.600°K) Balanced CCT (Correlated Color Temperature), in both cases with a CRI higher than 95 and both in Manual or Pole operated versions.

The fixture combines the classical SPOT/FLOOD beam control on an equivalent FOCUS RANGE to a conventional lamp fresnel, with an excellent barn door cutting.

It utilizes Standard accessories from the DE SISTI range of equivalent Fresnel Lens size, such as Barndoor, Color Frame, Cones, Scrims.

MODEL	DESCRIPTION
F20T.MO	Super LED F20 T - Tungsten CCT, Manual Operated
F20D.MO	Super LED F20 D - Daylight CCT, Manual Operated

Preliminary information subject to changes without notice



## WHAT'S INSIDE

### FIXTURE HEAD

500 mm. (20") diameter Fresnel lens  
POWERCON IN & OUT PANEL CONNECTORS.  
XLR 5 Pin DMX IN & OUT PANEL CONNECTORS.  
1000W high power CRI>95  
Built In Universal Power Supply 90-250V  
50/60Hz DMX controlled.

### YOKES

#### Manual Operated Versions

Mod. 490.110.40 M.O. yoke with 28,57 mm  
(B.S. 1 1/8") with top end for "C" clamp

### ACCESSORIES

Mod. 496.100 four leaf rotating barndoor  
Mod. 497.100 color frame

### CABLES

Mod. 5403.135 3 mt. (9.8 ft) detachable Blue  
POWERCON power cable with bare ends.

DMX cable is not included, to be ordered  
separately

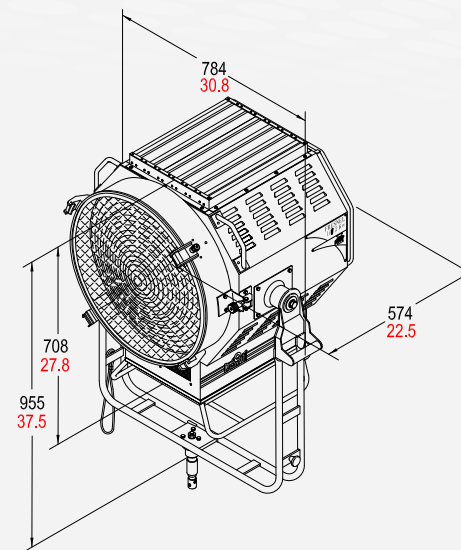
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## FEATURES

<b>Power to LED</b>	1000W - DC current to the LED - flicker free
<b>Rated Voltage &amp; PFC</b>	90-250V 50-60Hz PFC 0,96
<b>Power consumption</b>	1150W @ 230V   1150W @120V
<b>Power Connection</b>	powerCON IN & OUT
<b>DMX Data link USITT DMX512-A</b>	5-pin XLR for DMX in & out. Use shielded data cables. Do not overload the daisy chain. Up to a maximum of 32 devices can be used on a single DMX chain.
<b>DMX Channels</b>	1 @ 8bit   2 @ 16bit
<b>LED ARRAY Lifetime</b>	50.000 hours with 70% Lumen Maintenance. The LED ARRAYS are tested and certified up to LM80
<b>CCT</b>	<b>T:</b> 3.200°K <b>D:</b> 5.600°K
<b>CRI / TLCI</b>	<b>T:</b> 96 / 96 <b>D:</b> 96 / 96
<b>Protection Type</b>	IP20 - driver IP65
<b>Max. Housing Surface Temperature</b>	70° C
<b>Weight of Fixture</b>	<b>M.O.</b> 45,5 Kg (100.3 lb)
<b>Weight of Barndoor</b>	4 leaf 4,5 Kg (9.9 lb)
<b>Weight of color frame</b>	0,9 Kg (2.00 lb)
<b>Lens diameter</b>	500mm / 20"

## DIMENSION



## FEATURES

500 mm. (20") diameter high quality, shock resistant Borosilicate glass Fresnel lens on spring supports.

Rugged and lightweight Carbon Steel Housing with low glare black epoxy powder coating and reinforces internal double walls.

High efficiency Self Stabilizing Active Cooling: automatic, thermal stabilization of the LED operating temperature is managed by an internal thermal sensor and CPU, variable speed fan and heat sink to maintain the LED Array's constant temperature at a maximum of 65°C. The hydro dynamic bearing fan operates silently with a very low RPM.

Special Patented Optics for LED Technology.

Helix Screw driven focus mechanism which guides Teflon bushings supported LED ENGINE along 2 rods. This ensures smooth operation during focusing in any tilting position of the fixture. The Teflon bushings also provide a wiping action, which cleans the steel guide rails during focus.

The unit is equipped with a hinged lens door and wire guard. One of the 4 accessory brackets has a spring loaded locking knob to safely secure external accessories.

Accessories have been designed for one hand installation.

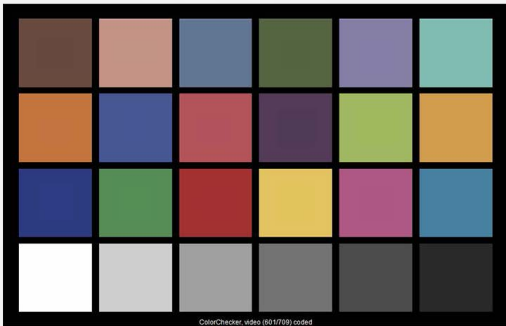
Available with either positive lock manual yokes for comfort and ease of handling, or pole operated yokes which can be used via the lighting pole for Panning and Tilting the lights as well as manually, since the mechanical activators are equipped with clutches.

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## TLCI

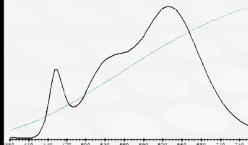
### TUNGSTEN CCT

De Sisti SUPER LED F20 - 1500W - Tungsten : CCT = P3105 (+0.4)  
TLCI-2012: 96 (P3105)



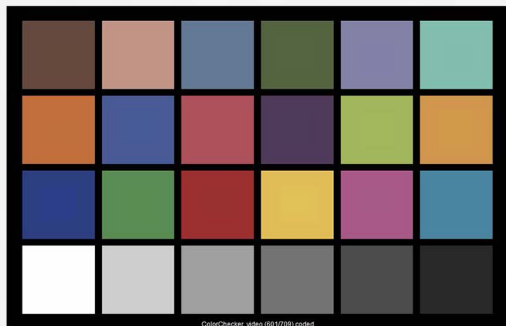
### Television Lighting Consistency Index-2012

Sector	Lightness	Chroma	Hue
R	0	0	0
RY	0	0	0
Y	0	0	0
YG	0	0	0
G	0	0	0
G/C	0	0	+
C	0	0	+
C/B	0	0	0
B	0	-	-
BM	0	0	+
M	0	0	+
M/R	0	0	+



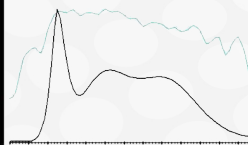
### DAYLIGHT CCT

De Sisti SUPER LED F20 - 1500W - Daylight : CCT = D5651 (+0.7)  
TLCI-2012: 96 (D5651)



### Television Lighting Consistency Index-2012

Sector	Lightness	Chroma	Hue
R	0	0	0
RY	0	0	-
Y	0	0	-
YG	0	0	0
G	0	0	0
G/C	0	0	0
C	0	0	-
C/B	0	-	0
B	0	-	---
BM	0	+	0
M	0	0	0
M/R	0	0	0



## PHOTOMETRICS

### // SUPER LED F20

Central Light intensity (Candle Power)

Illumination center values at Distances

**3.200°K TUNGSTEN BALANCED C.C.T. (Correlated Color Temperature) - 1000W (CRI>95) - TLCI: 96**

	Central Light Intensity (cd)	5 mt (16.4 ft)	10 mt (32.8 ft)	15 mt (49.2 ft)
<b>FLOOD</b>	59.859 cd	2.394 lux <i>222 FC</i>	599 lux <i>56 FC</i>	266 lux <i>25 FC</i>
<b>SPOT</b>	420.4711 cd	16.819 lux <i>1,563 FC</i>	4.205 lux <i>391 FC</i>	1.869 lux <i>174 FC</i>

**5.600°K DAYLIGHT BALANCED C.C.T. (Correlated Color Temperature) - 1000W (CRI>95) - TLCI: 96**

	Central Light Intensity (cd)	5 mt (16.4 ft)	10 mt (32.8 ft)	15 mt (49.2 ft)
<b>FLOOD</b>	69.300 cd	2.772 lux <i>258 FC</i>	693 lux <i>64 FC</i>	308 lux <i>29 FC</i>
<b>SPOT</b>	483.300 cd	19.332 lux <i>1,796 FC</i>	4.833 lux <i>449 FC</i>	2.148 lux <i>200 FC</i>



FLOOD  
SPOT  
FLOOD

5 mt 16.4 ft  
10 mt 32.8 ft  
15 mt 49.2 ft

Light beam diameter with Beam Angle (50% of center value)

Beam Sizes

	Beam Angle	5 mt (16.4 ft)	10 mt (32.8 ft)	15 mt (49.2 ft)
<b>FLOOD</b>	62°	6,01 mt <i>19.7 ft</i>	12,02 mt <i>39.4 ft</i>	18,03 mt <i>59.1 ft</i>
<b>SPOT</b>	14°	1,23 mt <i>4.0 ft</i>	2,46 mt <i>8.1 ft</i>	3,68 mt <i>12.1 ft</i>

Light beam diameter with Field Angle (10% of center value)

	Field Angle	5 mt (16.4 ft)	10 mt (32.8 ft)	15 mt (49.2 ft)
<b>FLOOD</b>	80°	8,39 mt <i>27.5 ft</i>	16,78 mt <i>55.1 ft</i>	25,17 mt <i>82.6 ft</i>
<b>SPOT</b>	34°	3,06 mt <i>10.0 ft</i>	6,11 mt <i>20.1 ft</i>	9,17 mt <i>30.1 ft</i>

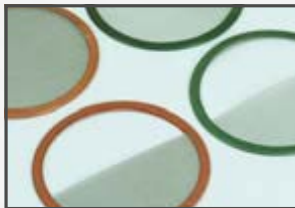
LUX AT ANY DISTANCE = Candle Power: [Distance(in m.)]<sup>2</sup>

FC. AT ANY DISTANCE = Candle Power: [Distance(in ft)]<sup>2</sup>

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## OPTIONALS & ACCESSORIES

<b>F20X.MO.DIN</b>	adder code to order DIN Spigot
<b>495.100</b>	Stainless Steel wire guard
<b>496.100</b>	Four leaf rotating barndoor
<b>496.200</b>	Eight way rotating barndoor
<b>497.100</b>	Color Frame
<b>499.100</b>	Set of scrims - Stainless steel
<b>499.101</b>	Full single scrim - Stainless steel
<b>499.102</b>	Full double scrim - Stainless steel
<b>499.103</b>	1/2 single scrim - Stainless steel
<b>499.104</b>	1/2 double scrim - Stainless steel
<b>397.100</b>	Outrigger color frame
<b>397.110</b>	Outrigger color frame holding kit
<b>91.210</b>	Aluminum black painted "C" clamp to hang fixtures overhead and for mounting on pipe with diameters up to 52 mm. (2"), with safety pin (no adapters)
<b>20.100</b>	Safety cable 800 mm. long with 4 mm. diameter steel rope and safety catch.
<b>490.110.40</b>	Steel tube Manual Operated stirrup with 28,57 mm. spigot (B.S. 1 1/8"), with top end for attachment to "C" clamp.
<b>490.300.40</b>	Steel tube Manual Operated stirrup with 28,00 mm. spigot (D.I.N 1 1/9")
<b>490.220.40</b>	Steel tube Manual Operated stirrup with M 12 Threaded hole